

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s) : Pavlakis, et al.  
U.S. Appln. No. : 08/050,478  
I.A. Appln. No. : PCT/US93/02908  
I.A. Filing Date : March 29, 1993  
For : **METHODS OF ELIMINATING INHIBITORY/  
INSTABILITY REGIONS OF mRNA**

Assistant Commissioner for Patents  
Washington, D.C. 20231

ASSOCIATE POWER OF ATTORNEY

Dear Sir:

Pursuant to the provisions of 37 CFR 1.33 and 1.34 and MPEP 402.02, the undersigned attorney of record hereby appoints the following as associate attorneys to prosecute this application, to receive the patent, and to transact all business in the Patent and Trademark Office in connection with the above-identified application:

Kurt E. Richter (Reg. No. 24,052); Eugene Moroz (Reg. No. 25,237); William S. Feiler (Reg. No. 26,728); Israel Blum (Reg. No. 26,710); Bartholomew Verdirame (Reg. No. 28,483); Maria C.H. Lin (Reg. No. 29,323); Christopher E. Chalsen (Reg. No. 30,936); Eugene C. Rzucidlo (Reg. No. 31,900); Mary J. Morry (Reg. No. 34,398); Michael M. Murray (Reg. No. 32,537); Jean E. Shimotake (Reg. No. 36,273); M. Caragh Noone (37,197); Kathryn M. Brown (Reg. No. 34,556); Leslie A. Serunian (Reg. No. 35,353); Dorothy R. Auth (Reg. No. 36,434); Richard W. Bork (Reg. No. 36,459); David V. Rossi (Reg. No. 36,659) and Carol M. Gruppi (37,341) of Morgan & Finnegan whose address is: 345 Park Avenue, New York, New York 10154.

Respectfully submitted,

Date

April 27, 1995

Robert Benson

Robert Benson

Registration No. 33,612

National Institutes of Health  
Office of Technology Transfer  
6011 Executive Boulevard, Suite 325  
Rockville, MD 20892  
Tel. No. (301) 496-7056

ASSIGNMENT

WHEREAS, we, George Pavlakis, residing at 9 Purdue Court, Rockville, Maryland 20850, U.S.A., a citizen of Greece, and Barbara K. Felber, residing at 9 Purdue Court, Rockville, Maryland 20850, U.S.A., a citizen of Switzerland have invented METHOD OF ELIMINATING INHIBITORY/INSTABILITY REGIONS FROM mRNA for which an International Application has been filed on March 29, 1993 under International Application No. PCT/US93/02908; and

WHEREAS, we are the applicants named in the above-identified application for Letters Patent; and

WHEREAS, the conditions under which said invention was made are such as to entitle The Government of the United States of America, as represented by the Secretary, Department of Health and Human Services (hereinafter THE GOVERNMENT) under Paragraph 1(a) of Executive Order 10096 to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, THE GOVERNMENT is desirous of acquiring all domestic and foreign right, title, and interest in the above-mentioned invention described in the application for Letters Patent; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to THE GOVERNMENT, as represented by the Secretary, Department of Health and Human Services, the full and exclusive rights in and to said invention in the United States of America and within each and every foreign country in which THE GOVERNMENT elects to file and the entire right, title, and interest in and to such applications, and any continuations, continuations-in-part, divisions, reissues or extensions thereof, and including priority rights as may be filed in the United States of America and foreign countries, and such Letters Patent as may be granted to be held by THE GOVERNMENT to the end of the term for which the same would have been held by the inventors had this assignment not been made.

We further agree to make, execute, and deliver to the Secretary, Department of Health and Human Services, upon request, any and all papers, documents, affidavits, or other instruments that may be necessary in the prosecution of any application or applications for improvements or reissues of Letters Patent, and to assist THE GOVERNMENT in every way as may be requested in protecting said invention, provided that any expense of extending such assistance shall be paid by THE GOVERNMENT.

IN WITNESS WHEREOF we subscribe our hands and seals on the dates shown below:

George A. Pavlakis  
George Pavlakis

Date May 13, 1993

County of Frederick  
State of Maryland SS:

Subscribed and sworn to before me this 13th day of May, 1993.

Sondra L. Cavanaugh  
Notary Public  
Sondra L. Cavanaugh  
My Commission Expires: 1/1/96

2026-4006PCT

Barbara K. Felber  
Barbara K. Felber

Date 5/13/93

County of Frederick  
State of Maryland SS:

Subscribed and sworn to before me this 13th day of May, 1993.

Sondra L. Cavanaugh  
Notary Public  
Sondra L. Cavanaugh

My Commission Expires: 2/1/96

REC 1544 HAN 884

RECORDED  
PATENT & TRADEMARK OFFICE  
MAY 18 93

27 Rec'd PCT/PTO 1 8 MAY '93

[illegible]

## COMBINED DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that my residence, post office address and citizenship are as stated below next to my name, the information given herein is true, that I believe I am the original, first and sole (if only one name is listed below) or an or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: METHOD OF ELIMINATING INHIBITORY/INSTABILITY REGIONS FROM mRNA

which is described in:  
☐ the attached application or

☒ PCT International Application No. PCT/US93/02908 filed 29 March 1993  
☒ the specification in application Serial No. 08/050,478 filed August 10, 1994  
 (if applicable) and amended on \_\_\_\_\_

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose all information known to me which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56 (a).

I hereby claim foreign priority benefits under Title 35 United States Code, § 119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign applications(s) for patent or inventor's certificate or any PCT international applications(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed.

COUNTRY	APPLICATION	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 USC § 119
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No
			<input type="checkbox"/> Yes <input type="checkbox"/> No

I hereby claim the benefit under Title 35, United States Code §120 of any United States application(s) or PCT International application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application.

Application Serial No.	Filing Date	Status: patented, pending, abandoned
07/858,747	27 March 1992	pending

I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:

James C. Haight, Reg. No. 25,588; Gloria Richmond, Reg. No. 30,416; Robert Benson, Reg. No. 33,612; Jack Spiegel, Reg. No. 34,477; Laurence J. Hyman, Reg. No. 35,551; Denise C. Bernstein, Reg. No. 35,787; Susan S. Rucker, Reg. No. 35,762; David R. Sadowski, Reg. No. 32,808 and Ann S. Hobbs, Reg. No. 36,830 and Arthur J. Cohn, Reg. No. 37,800 all of the Office of Technology Transfer, National Institutes of Health, 6011 Executive Boulevard, Suite 325, Rockville, MD 20852

I further direct that all correspondence concerning this application be directed to:

Patent Branch  
 Office of Technology Transfer  
 National Institutes of Health  
 Box 13  
 6011 Executive Boulevard, Suite 325  
 Rockville, MD 20852  
 Telephone: (301) 496-7056  
 Fax: (301) 402-0220

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of first joint inventor: George N. Pavlakis

Inventor's signature: George N. Pavlakis

Date: 10/24/94

Country of Citizenship: Greece

Residence: 9 Purdue Court, Rockville, Maryland 20850, U.S.A.

Post Office Address: 9 Purdue Court, Rockville, Maryland 20850, U.S.A.

Full Name of second joint inventor: Barbara K. Felber

Inventor's signature: Barbara K. Felber

Date: 10/24/94

Country of Citizenship: Switzerland

Residence: 9 Purdue Court, Rockville, Maryland 20850, U.S.A.

Post Office Address: 9 Purdue Court, Rockville, Maryland 20850, U.S.A.

NOT RECORDED